## A CASE OF REMOVAL OF BOTH TESTICLES FOR RECURRENT CARCINOMA OF THE EPIDIDYMIS.<sup>1</sup>

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Early in January, 1887, John S—, a powerfully built, Irish laborer, thirty-five years of age, applied for admission to my service in St. Mary's Hospital with the following history.

Two months previously he had first noticed a hard nodule in the epididymis of the right testicle, his attention having been called to the part by lancinating or burning pains which gradually became almost continuous as the tumor increased in size, which it rapidly did, so that in the time mentioned it had attained to about six times its original dimensions. On examination a tumor involving the head of the epididymis was easily located, the skin of the scrotum being firmly adherent to it.

The mass had the stony hardness of a schirrous growth, was very sensitive to pressure, and was about the size of a large grape. A small nodule possessing similar characteristics occupied the tail of the epididymis, but the testicle itself seemed free from disease. No induration of any of the lymphatics in the neighborhood was discovered, and the left testicle seemed perfectly healthy. The patient denied having ever had any venereal disease, in fact that he had ever been exposed, and knew of nothing in his family history which would clear up the diagnosis.

I explained to him my suspicions as to the nature of the

<sup>&</sup>lt;sup>1</sup>Read before the American Association of Genito-Urinary Surgeons, at Washington, D. C., Sept. 19, 1888.

growth, and that any deception on his part would lead to a grave error in treatment, but he only reiterated his statements and told me to do what I thought best for him.

I accordingly proposed an immediate extirpation of the testicle, and on Jan. 28th removed it, with all adherent skin and a high section of the spermatic cord.

The cavity remaining was carefully irrigated with a 1-6000 mercuric bin-iodide solution, a bone drain introduced and the approximated by cutaneous flaps a continuous catgut suture. Iodoform dusted the skin and over a massive paper-wool compress completed the dressing, which was left undisturbed for twelve days.

Feb. 9th. The wound was exposed for the first time and found completely healed except at one place where a ligature from the cord still remained attached. This came away at the next dressing, Feb. 14th, and the patient left the hospital. Feb. 22d, perfectly well, and with no sign of trouble with the remaining testicle.

On referring the tumor to Dr. L. E. Tieste, the Pathologist of the Hospital, for examination, I obtained a report from which I quote: "The tumor was an irregularly shaped mass, and there was no definite line of demarcation between the normal and diseased tissues.

Superiorly where the hardness was most marked, it was gritty on section by the knife, and presented the glistening white color with small yellowish spots, characteristic of schirrus. On microscopic examination well formed connective tissue was found containing numerous blood vessels. It was interesting to note the large number of cells and "cell nests" which were much more numerous than is usual in cases of schirrus. These may be accounted for by a rapid development."

The diagnosis of schirrus made by Dr. Tieste was confirmed by Dr. J. H. Hunt, the Hospital Curator, who examined sections from different portions of the tumor. I saw the patient occasionally until April, when I lost sight of him, but on May 1st he again presented himself at the Hospital, declaring that since our last interview the characteristic pains had returned in the left testicle and that a tumor had rapidly developed

during the last month. On examination I found a mass about half the size of the first tumor occupying the left epididymis and having the same physical peculiarities. No sensitiveness or induration existed in the stump of the right cord, nor was there any enlargement of the iliac, lumbar or inguinal glands on either side.

An immediate operation was proposed and assented to, and on the following day I removed the left testicle with the same precautions which I had adopted on the right, except that catgut was used in the place of silk for the ligating of the vessels of the cord.

On the following day and for several following the patient's temperature never exceeded  $98^1/2^\circ$ , but on the morning of the sixth day, it suddenly rose, and on removal of the dressings the wound was found nearly healed, but with a swollen and suppurating area about its upper angle. This accident which was due to an orderly's carelessness in disturbing the dressings, delayed the progress of the case slightly, but the patient was well enough to leave the Hospital on May 17th with a small fistulous opening in the scrotum which healed in a few weeks, when he again returned to his work as a porter in a large manufactory. At an interview on July 8th, '88 he told me that he had been steadily at work ever since, and the most careful inspection failed to discover any signs of the return of his disease.

A microscopic examination of the specimen removed, resulted in a similar opinion as to the nature of the disease, and as in the first instance the testicle was not involved in the diseased process. The microscopic appearances of the sections examined, seem identical with those reported by Hulke and Curling as seen in a case of schirrus of the testicle presented to the London Pathological Society by Bryant.

I have deemed the case worthy a full report not only on account of the extreme rarity of the disease which it illustrates,—I have been able to find only twenty seven cases of carcinoma testis recorded during the last twenty years —but because of special features of its own.

<sup>&</sup>lt;sup>1</sup> The Operative Surgery of Malignant Disease. Butlin, p. 289; and current medical literature since publication of above.

So far as I know it is the only case yet recorded, in which the schirrous form of carcinoma has manifested itself as a primary affection of the epididymis, and recurred after a short interval in the same organ on the opposite side without any reappearance at the site of the first operation, or extension by glandular or cutaneous infiltration. It is also a very rare exception to the rule that where the scrotnm is involved at the time of the operation, speedy recurrence in the glands of the affected side occurs. The acuteness of the attack and rapid recurrence are rare too, as considered in relation to true schirrus, which usually pursues an essentially chronic course. Cooper and Curling both narrate cases of schirrus of the testis as occurring in men previously healthy, but in the former's patient the disease had been in progress a year when submitted to operation, death resulting a month after, while in the latter's case the man had suffered for five years, abscess having formed, and the scrotum being involved, yet-the case being considered unfit for operation,—lingered for another year before terminating fatally. Whether the ultimate result in my own case will be favorable or not is of course still doubtful, as the "three vears limit" deemed essential by Butlin and other writers has not been reached, but as in almost all fatal cases the recurrence of schirrus after operation has been very rapid, I am strongly hopeful that as in other respects my patient may prove an exception to the rule.